

Notice of Allowability

Application No.

10/761,210

Examiner

Jerry Martin Blevins

Applicant(s)

NAGASAKA ET AL.

Art Unit

2883

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to communication filed on 20 December 2005.
2. ☒ The allowed claim(s) is/are 1-25.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.


Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☐ Examiner's Amendment/Comment
8. ☐ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____


Brian Healy
Primary Examiner

DETAILED ACTION

Response to Arguments

Applicant's arguments, see page 13 and the corresponding amendments to the abstract and claims 14-16, filed 20 December 2005, with respect to objection to the abstract and the objection to claims 14-16 on the basis of lacking proper antecedent basis, have been fully considered and are persuasive. The objection to the abstract and the objection to claims 14-16 on the basis of lacking proper antecedent basis have been withdrawn.

Applicant's arguments, see pages 14 and 15, filed 20 December 2005, with respect to rejection of 10, 12, 18-20, 24, and 25 under 35 U.S.C. 102(e), have been fully considered and are persuasive. The rejection of claims 10, 12, 18-20, 24, and 25 has been withdrawn.

Allowable Subject Matter

Claims 1-25 are allowed.

Regarding independent claims 1, 3, 6, and 7, Pommel teaches a method of manufacturing an optical module including a transparent substrate having an electro-optical element on one surface side, an optical transmission line support member, which is arranged on the other surface side of the transparent substrate and supports one end of an optical transmission line, and an optical coupling member, which is arranged on the other side surface of the transparent substrate and has a role of optical coupling the

Art Unit: 2883

electro-optical element with the optical transmission line, the method comprising: forming a guide pin in either the optical transmission line support member or the transparent substrate (optical coupling member) and forming a guide hole, in which the guide pin is to be inserted, in the other one of the optical transmission line support member or the transparent substrate (optical coupling member), in which the guide pin is not formed. Pommel does not teach that the diameter of the guide hole is made larger to produce a gap between the guide pin and the guide hole when the guide pin is inserted into the guide. Pommel also does not teach the further method steps listed in claims 1, 3, 6, and 7. Furthermore, Pommel, either alone or in combination with the prior art, does not disclose or render obvious that the diameter of the guide hole is made larger to produce a gap between the guide pin and the guide hole when the guide pin is inserted into the guide or the further method steps listed in claims 1, 3, 6, and 7.

Claims 2, 4, 5, 8, and 9 are allowed based on their dependence on allowed base claims.

Regarding independent claims 21 and 22, Pommel teaches a method of manufacturing an opto-electricity mixed device, including: a circuit board, having a conductive film that transmits an electrical signal and an optical transmission line having a roll of transmitting signal light; and a hybrid integrated circuit chip, which is coupled to the circuit board and has a role of conversion between the electrical signal and the signal light, the method comprising: forming a guide pin in either the hybrid integrated circuit chip or the circuit board, and forming a guide hole, in which the guide pin is to be inserted, in the other one of the hybrid integrated circuit chip or the circuit board, in

which the guide pin is not formed. Pommel does not teach that the diameter of the guide hole is made larger to produce a gap between the guide pin and the guide hole when the guide pin is inserted into the guide. Pommel also does not teach the further method steps listed in claims 21 and 22. Furthermore, Pommel, either alone or in combination with the prior art, does not disclose or render obvious that the diameter of the guide hole is made larger to produce a gap between the guide pin and the guide hole when the guide pin is inserted into the guide or the further method steps listed in claims 21 and 22.

Claim 23 is allowed based on its dependence on allowed base claim 21.

Regarding independent claims 10 and 12, Pommer teaches an optical module, comprising: a transparent substrate (Figure 6E, element 17), which has optical permeability to the wavelength of the light used; an electro-optical element (Figure 6E, element 19), which is arranged on one surface side of the transparent substrate and radiates signal light toward the other surface side of the transparent substrate according to a provided electrical signal, or which generates an electrical signal according to the luminous intensity of signal light provided from the other surface side of the transparent substrate; an optical transmission line support member (Figure 6E, element 226), which is arranged on the other surface side of the transparent substrate and supports one end of an optical transmission line; and an optical coupling member (Figure 2C, element 1), which is arranged on the other surface side of the transparent substrate and performs optical coupling between the electro-optical element and the optical transmission line, either the optical transmission line support member or the transparent substrate

Art Unit: 2883

(coupling member) has a guide pin (Figure 6E, element 72), while the other one has a guide hole (Figure 6E, element 71), in which the guide pin is to be inserted. (Also see abstract, column 8, lines 25-51, column 33, lines 13-27, column 46, lines 55-64, Figures 5B, 9, 12A, and the sections of the disclosure related to the above figures). Pommer does not teach that the diameter of the guide hole is made larger as compared with the diameter of the guide pin so that a gap is produced between the guide pin and the guide hole, and the gap between the guide pin and the guide hole is filled up with a predetermined filler material. Furthermore, Pommel, either alone or in combination with the prior art, does not disclose or render obvious that the diameter of the guide hole is made larger to produce a gap between the guide pin and the guide hole when the guide pin is inserted into the guide.

Claims 11 and 13-20 are allowed based on their dependence on allowed base claims.

Regarding claim 24, Pommel teaches an opto-electricity mixed device, comprising: a circuit board having a conductive film that transmits an electrical signal (Figure 6E, element 35) and an optical transmission line transmitting signal light (held in ferrule 226, Figure 6E); and a hybrid integrated circuit chip (Figure 6E, element 19), which is coupled to the circuit board and converts the electrical signal into the signal light, or vice versa, either the circuit board or the hybrid integrated circuit chip having a guide pin (72), and the other having a guide hole (71). Pommer does not teach that the diameter of the guide hole is made larger as compared with the diameter of the guide pin so that a gap is produced between the guide pin and the guide hole, and the gap

Art Unit: 2883

between the guide pin and the guide hole is filled up with a predetermined filler material. Furthermore, Pommel, either alone or in combination with the prior art, does not disclose or render obvious that the diameter of the guide hole is made larger to produce a gap between the guide pin and the guide hole when the guide pin is inserted into the guide.

Claim 25 is allowed based on dependence from allowed base claim 25.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jerry Martin Blevins whose telephone number is 571-272-8581. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Frank G. Font can be reached on 571-272-2415. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2883

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JMB



Brian Healy
Primary Examiner